DELIVERABLE EXPECTATION MATRIX

	Project Definition	Project Initiation and Alignment	Project Planning and Endorsement (10%)	Geometric Review (30%)	General Plans Review (60%)	Preliminary Contract Review (90%)	Final Contract Review (100%)	Contract Ad and Award	Project Close Out and Archiving
Milestone Purpose	Documents the project purpose, type, strategy, phase durations, budget, and recommended ad date.	Provides basis to charter project team and begin developing the PMP.	Documents the key project criteria, assumptions, and deliverable format.	Documents design criteria and major design decisions.	Design of major project elements completed, review for constructability, conformance with standards	On small projects, this may be combined with the final PS&E Review. On major projects, this is an added constructability review. This is intended to be a near-final PS&E review. Items missing from design should be minor and should be documented to reviewers.	PS&E documents are reviewed by the Region (typically 10 weeks). At end of this review, Contract Plans are Ad Ready.	Submittal of all final deliverables for owner acceptance.	Archive and forward all required project records and files.
Decisions Frozen and Milestones Completed **(Overview)**		√ Expected level of effort √ Authorized budget √ Deliverable list	√ Milestone dates set √ Study framework set √ Study criteria set √ Assumptions defined √ Design criteria set	√ Design concept fixed √ Design features defined √ NEPA/SEPA approval obtained √ Type size and location of all structures fixed √ Footprint set √ Approval to begin ROW acquisition process √ Approval of geometric design √ Design Concurrence/ Approval	√ All key project elements and features that drive the project outcome and costs are defined. √ Type, size and location of key elements and features fixed. √ Geometric Review comments resolved and documented.	√ The deliverables are substantially complete √ Review and acceptance of design detail of key elements and features √ Permits Obtained. All environmental permits are approved, verified, and accepted for inclusion into the plans √ General Plans Review comments resolved & documented.	√ The deliverables are complete. √ All review comments adjudicated. √ Plans and specifications stamped and sealed at end. √ ROW Certification √ Final Project Approval	√ Owner accepts design √ Approval to advertise √ ROW is clear	√ PS&E documents boxed w/original plans & sent to Archive. √ Electronic CAD and CAE files and supporting project documentation transmitted to the WSDOT Project Manager.
Pre-Construction									
Design/PS&E Elements									
Project Management	• Project Definition completed • Environmental Review Summary completed • Design Decisions Summary completed	• Project description completed • Team assignments made • Team identification completed • Roles & responsibilities established • Measures of success identified • Major Milestones established • Boundaries of project identified • Operating guidelines established • Lessons Learned Database reviewed	Project Management Plan completed, including: • Baseline schedule • Budget • Risk assessment • Communication plan • Change management plan • QA/QC plan					• Construction Project Management Plan completed	• Lessons Learned captured and reported • Evaluation of team/ consultant performance completed

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Environmental Documentation	• Environmental Review Summary completed (Determine type of environmental documentation needed)	• Verify Environmental Documentation and permits needed • Agreement on Area of Potential Affect for Section 106 and Action Area for ESA work	• Environmental Documentation and permits coordinated with agencies	• Agency and public coordination conducted • Complete determination if utility relocations will be included in WSDOT documents and permits • Permits needed verified and begin submitting applications • Discipline studies, reports, and predecessor information completed • NEPA/SEPA approval	• All environmental permit application submitted • Permits conditions coordinated with the design team and incorporated into the plans	• All environmental permits approved, verified, and accepted for inclusion into the plans • All environmental special provisions approved and included in the PS&E plan set	• Environmental Commitment and Compliance Notebook completed	• Environmental Preconstruction Meeting (if applicable)	
Intersection, Channelization or Interchange Plans	• Channelization and intersection issues and deficiencies identified		• Intersection improvement recommendations endorsed	• Deviations and design exceptions submitted and approved • Channelization and Intersection Plans approved • Signal Permits completed (if required) • Confirm phasing and pocket lengths with traffic operations		• Approved Channelization Plan verified for consistency with plans and specifications			
Estimates	• Preliminary cost estimate developed for Project Definition	• Budget assumptions communicated	• Determine if project needs Value Engineering or Cost Risk Assessment/Cost Estimating Validation Process	• Cost estimate updated • Right of Way Project Funding Estimate completed	• Cost estimate updated • Pay groups and pay items determined	• Cost estimate completed including below the line items • Summary of quantities completed • Item prices determined • Lump sum cost detail completed	• Construction estimate finalized		
Geometrics	• Project limits identified • Affected alignments identified • New versus existing alignment determined • Lane/shoulder widths determined • Design matrix identified • Design speed defined • Preliminary design criteria established		• Design criteria/ parameters approved • Preliminary footprint designed	• Typical roadway section(s) completed - identifying station to station roadway geometrics, surfacing type & depth, slope information, guardrail, vertical cut locations, and construction notes • Deviations & design exceptions approved • Mainline and major horizontal, & vertical alignments, & superelevations designed • Design Approval obtained	• All horizontal & vertical alignments & Superelevations completed • DDP updated as required	• All geometric plans completed (alignment, profiles, roadway sections, interchange contours, site preparation, road approach plans, etc…) • Design compared to endorsed design criteria/ parameters			

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Hydraulics *& Water Quality* **(also see TESC)**	• Design criteria identified • Drainage Deficiencies identified in accordance with Maintenance and Regional Hydraulics • Storm water Management requirements identified • Water quality requirements identified	• Deficiencies confirmed with Maintenance	• Hydraulic and Water Quality issues identified • Deficiencies confirmed with Project/Design Team • Storm water Management Requirements documented • Sensitive Area Documentation completed(Water Resource Inventory). • Stormwater Management Strategy endorsed	• TS&L of drainage facilities determined • Preliminary Hydraulics Report completed, including: o Documentation of deficiencies o Existing basins and flows for anticipated TDAs o Identification of Minimum Requirements from Highway Runoff Manual (HRM). • Storm Water Report submitted to region for review and approval • Hydraulics Report Submitted • Preliminary Stormwater Management options to identify Right of Way needs completed	• Hydraulics Report approved	• Approved Hydraulic Report verified for consistency with plans and specifications • Storm water details completed			
Illumination Also refer to "Expectation for Illumination Reviews" matrix.			• Decision on design standards, equipment, etc. completed	• Refer to Deliverables in the Illumination Matrix "Permitting Submittal Review" • Warrant Analysis completed	• Refer to Deliverables in the Illumination Matrix "Intermediate PS&E Submittal Review"	• Refer to Deliverables in the Illumination Matrix "PS&E Pre-Submittal Review"	• Refer to Deliverables in the Illumination Matrix "Final PS&E Submittal Review"		
ITS Also refer to "Expectation for ITS Reviews" matrix.			• ITS design methodology for review completed • Type, size, and location completed • Decision made on design standards, equipment	• Refer to Deliverables in the ITS Matrix "Permitting Submittal Review" • Soils analysis request for special design CCTV or ramp-meter foundations submitted • Preliminary Signal Plan submitted to HQ Traffic for approval	• Refer to Deliverables in the ITS Matrix "Intermediate PS&E Submittal Review"	• Refer to Deliverables in the ITS Matrix "PS&E Pre-Submittal Review"	• Refer to Deliverables in the ITS Matrix "Final PS&E Submittal Review"		
Right-of-way	• Requirements for Right of Way documented	• Preliminary Right of Way needs identified	• Title reports ordered	• Right of Way plan completed and approved • ROW Appraisals completed • Relocation Plan completed • Right of Way Project Funding Estimate prepared • Right of Entry for project investigations obtained	• ROW appraisal reviews completed and offers made • ROW acquisition and Relocation initiated	• Right of Way negotiations completed	• Right of Way relocations completed	• Right of Way certified	

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Roadside	• Roadside Restoration Worksheet completed – define impacts and estimate restoration to meet Roadside Classification Plan requirements • Complete determination if Roadside Restoration will be included in construction contract or by a separate contract.	• Scope of work for mitigation and roadside restoration efforts defined • Need for coordination of visual elements in project identified • Complete determination of whether Visual Quality Assessment is needed for Environmental Document	• Visual Quality Analysis developed • Complete verification of roadside impacts, scope and estimate for restoration of roadside • Wetland areas delineated for survey	• Site Analysis completed • Functional Analysis completed • Conceptual Design completed • Conceptual Irrigation/planting Plan completed • Preliminary Plant Palette completed. • Mitigation Site Selection completed. • Evaluation of TS&L of Structures and Walls and determine treatment for visual aspects completed	• Preliminary irrigation layout completed • Necessary agreements identified (water, electric, maintenance) • Coordination completed with Architect to detail treatment of visual elements completed • Final Conceptual Plans, Grading and Planting plans for Mitigation report completed • Coordination completed with Environmental and Biology for Mitigation Report Development	• Landscape Architect stamps plans for roadside restoration, environmental mitigation, irrigation and contour plans • Recommend preferred option to accomplish required plant establishment beyond 1st year	• Commitment file transmitted to construction PE		
Roadside Safety		• IHSDM - (Interactive Highway Safety Design Model) utilized if applicable	• Accident & crash history reviewed • Conflicting traffic movements (diverging, merging, weaving, crossing) identified • Pedestrian & bicycle needs identified • Non-standard barrier identified • Access review completed	• Fall restraint requirements identified • Complete coordination of proposed removal of significant vegetation with Landscape Architect • Clear Zone Inventory & Evaluation completed • Utility conflicts identified • Geometric mitigations i.e. shoulder widening incorporated into design • Geometric Check completed – Intersections, horizontal, vertical sight distances	• Hazard Mitigation completed– i.e. barrier length of need, fixed objects, attenuator design, drainage structures • ADA requirements completed	• Quantity Tabulation completed		• Utility relocation coordination completed	
Signals Also refer to "Expectation for Signal Reviews" matrix.			• Signal design methodology completed	• Refer to Deliverables in the Signals Matrix "Permitting Submittal Review" • Signal permit submitted to WSDOT.	• Refer to Deliverables in the Signals Matrix "Intermediate PS&E Submittal Review"	• Refer to Deliverables in the Signals Matrix "PS&E Pre-Submittal Review"	• Refer to Deliverables in the Signals Matrix "Final PS&E Submittal Review"		

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Signing				• Sign layout completed, including overhead signs • Existing signs to reuse, and relocate determined • Existing sign inventory completed (include associated electrical items for sign lighting or flashing signs) • Potential conflicts between light standards and signal poles with signs identified	• Visual standards for corridor coordinated with Landscape Architect • Signing plans, notes, sign specifications completed • Conflicts with illumination and/or signal features, drainage or utilities identified • Coordination with luminaries on structures or walls identified and mounting/foundation details completed • Requests for Sign structures submitted to HQ Bridge and Structures • Service load and line loss calculations completed • Utility Agreement and Utility Relocation Requests submitted	• Signing detail sheets completed			
Soils & Paving	• Scoping Level Pavement Design Report completed, including: o WSPMS/Historical Data/Maintenance Input o Projected Traffic Type/Usage o Existing Conditions/Primary Deterioration	• Project soils investigations defined • Scoping Level Pavement Design reviewed • Onsite field investigation scheduled (schedule and initiate no sooner than 1 year prior to construction) • Topographic survey requested • Region materials resurfacing report requested	• Soils investigation initiated • Field and Core Investigation completed • Draft Pavement Design Report completed • Borings coordinated with signals, high mast & sign structures, and ITS CCTV poles	• Soils and Geotechnical Report completed • Pavement Resurfacing Report completed • Draft Pavement Design Report completed and approved by Region, (forwarded to State Materials Lab for concurrence) • Foundation Design checked as requested by Design PEO for signals/illumination • Complete assessment and initiation of on-site field testing as required. (Forward to State Material's Lab if required)	• Draft Pavement Design Report completed • Final Pavement Design Document stamped by Region and forwarded to State Material's Lab for signed concurrence • Foundation Design for signals/illumination completed • Rec Plan completed	• Final Pavement Design Document with Region stamp and State Material's Lab signed concurrence to Region for Plan Review • All permits and environmental requirements completed • Materials Source Report completed and submitted to State Material's Lab	• Boring logs submitted	• Geotechnical Report compiled for contractor review • Geotechnical Report & cross-sections posted on website • Pavement Repair quantities and locations reviewed with Construction PEO for verification of field accuracy	
Specifications					• Specifications run list completed • Specialty groups specifications and special provisions completed • Pay groups and pay items determined	• Prepare summary of quantities • Determine item prices • All special provisions submitted for review and approval	• Approved Specifications included in PS&E		

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Structures (Bridges, Retaining Walls, Noise Walls, high mast lighting, sign structures) Also refer to "Expectation for Structural Reviews" matrix.		• Scope for TS&L Determined • Structural Input on Environmental Documentation and Permits Provided	• Structural Participation in Agency Coordination Provided	• Refer to Deliverables in the Structural Matrix "Intermediate PS&E Submittal Review" • Complete TS&L • Bridge and Wall Site Date Completed for Preferred Structural Alternative Structural Permitting Submittal Review Completed (includes constructability review for viable construction method, sequence, and schedule)	• Refer to Deliverables in the Structural Matrix "PS&E Presubmittal Review"	• Refer to Deliverables in the Structural Matrix "Final PS&E Review"	• Refer to Deliverables in the Structural Matrix "Ad Copy"		
Survey & Mapping		• Project survey requirements finalized, including areas that may be outside roadway corridor improvements.	• Project survey control completed • Cadastral survey performed • Topographic Survey performed	• Design level mapping completed • Record of Survey completed and filed • Right of Way plan completed and approved • Relocation plan completed	• Mapping of new roadway features completed • Field review of proposed features completed	• DNR Permits to Destroy Monuments obtained	• Preliminary construction staking data completed		
Temporary Erosion and Sediment Control (TESC)				• Preliminary TESC completed	• TESC plan submitted to region for review and approval	• Final TESC approved, including site visit • Construction Water Quality Monitoring Plan submitted	• Approved TESC letter transmitted to PS&E • Erosion Control Plans and Notes completed	• Staking of TESC measures and construction reviewed	
Traffic Analysis			• Traffic Impact Analysis (TIA) scope established	• Accident Analysis completed • Traffic Operational Analysis completed	• Assumptions and conclusions in Traffic Analysis verified for consistency with design				

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Utilities	• Utilities within the project limits notified • Washington Utilities Transportation Commission (WUTC) permit application for railroad crossings submitted	• Potential utility relocations identified • Responsibility for costs established	• Utility As-Builts requested • Railroad (RR) issues identified • Relocation cost responsibility defined • Franchise and permit documentation collected • Utility relocation strategy for project established	• Utility Plan with as-built information completed and transmitted to Utilities • Preliminary Utility conflicts identified • Utility Object Relocation Record (UORR) sent to utilities • Project Overview Meeting held with Utility Owners • Subsurface Utility Engineering (SUE) Quality Level C & D completed • Determination of need for SUE Quality Level A & B • Relocation plans and schedule requested from utilities • Franchise and permit process initiated • Cost recovery accounts initiated • Utility property rights verified • Railroad standard Construction Maintenance Agreement (CMA) obtained	• Utility conflicts confirmed and relocation letters sent to utilities • Utility relocation meeting held • Utility Relocation Plans and schedules obtained and approved • Utility and railroad agreements completed • Utility permits and franchises obtained • Finalize utility agreements (costs responsibility estimate complete)	• Utility Relocation Plan information and specifications Incorporated in PS&E • Letters of Understanding issued to utilities requiring relocation • Utility, service, and railroad agreements completed • Utility relocation and schedule monitored and coordination completed • Construction Maintenance Agreement completed		• Utility relocation work completed	
Public Involvement Plan		• Define Stakeholders List	• Public Involvement Plan completed						
Work Zone Traffic Control		• Basic traffic control strategies and alternatives completed	• Traffic control strategy completed	• Preliminary traffic control layouts completed	• Traffic control plans showing Construction Sequence and staging completed	• Final traffic control plans completed • Final detour plans completed	• Traffic Control Plans Completed and associated Specials approved		